<u>**AMENDMENTS TO THE CLAIMS**</u>

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1.   (Currently Amended) A system for controller configuration and programming, comprising:

a controller connected to a power line;

a configuration device ~~that can be~~ connected to ~~a network~~ Internet, wherein the configuration device and the controller utilize at least an interface to communicate over the power line and the ~~network~~ <u>Internet</u> to enable remote controller configuration and programming; and

the interface implements a peer-to-peer communication network.

2.   (Cancelled)

3.   (Previously Presented) The system of claim 1, the interface contains a globally unique identifier and a serial number to insure unique identification.

4.   (Previously Presented) The system of claim 3, the interface is contained within the controller.

5.   (Previously Presented) The system of claim 1, the controller is a programmable logic controller (PLC).

6.   (Previously Presented) The system of claim 1, the configuration device configures one or more modules associated with the controller.

7.   (Previously Presented) The system of claim 1, the configuration device configures the controller by exchanging configuration, data, and down loading a file to the controller.

8.   (Previously Presented) The system of claim 7, the down loaded file is an executable software program.

9.   (Previously Presented) The system of claim 7, the down loaded file is a web page.

10.   (Withdrawn) A system for monitoring the health of electrical devices comprising:
        a diagnostic component;
        an electrical device; and
        power lines connecting the diagnostic component to the electrical device, wherein the diagnostic component monitors the health of the electric device utilizing the power lines.

11.   (Withdrawn) The system of claim 10, further comprising an interface associated with the diagnostic component and the electrical device to enable communication between the diagnostic component and the electrical device over the power lines.

12.   (Withdrawn) The system of claim 11, wherein the interface retrieves a communication signal imposed on a power signal transferred over the power lines.

13.   (Withdrawn) The system of claim 12, wherein the quality of the power signal is improved before it is transferred to an electrical device to provide electrical power thereto.

14.   (Withdrawn) The system of claim 11, wherein the electrical device is a programmable logic controller (PLC) module.

15.   (Withdrawn) The system of claim 14, wherein the module is a control module.

16.   (Withdrawn) The system of claim 14, wherein the module is an input/output module.

17.   (Withdrawn) The system of claim 11, wherein the electrical device is connected to a programmable logic controller (PLC) module.

18.   (Withdrawn) A system for remotely interacting with industrial control modules comprising:

    a chassis housing a plurality of control modules;

    a chassis power supply connected to a power line network utilizing an interface and communicatively connected to the plurality of modules over a backplane;

    a configuration device connected to the power line network utilizing an interface such that configuration data can be exchanged with one or more modules *via* the power line network and chassis backplane.

19.   (Withdrawn) The system of claim 18, further comprising a diagnostic/prognostic component to monitor the health of a module over the power line network and backplane.

20.   (Withdrawn) A method for programming a logic controller comprising:

    connecting the logic controller to a power supply utilizing power lines;

    generating a program on another device connected to a power supply utilizing power lines; and

    transferring the program to the logic controller for execution over the power lines.

21.   (Withdrawn) The method of claim 20, wherein the program is a ladder logic program.

22.   (Withdrawn) An article of manufacturing comprising a computer usable medium having computer readable instructions stored thereon to perform the method of claim 20.

23.   (Withdrawn) A method of monitoring electrical device health comprising:

    establishing a connection to one or more electrical devices over power lines; and

    monitoring one or more device health parameters over the power lines.

24.   (Withdrawn) The method of claim 23, further comprising notifying an entity of an impending failure.

25.   (Withdrawn) The method of claim 23, the electrical device being one or more modules associated with an industrial controller.

26.   (Withdrawn) The method of claim 23, one of the health parameters including module temperature.

27.   (Withdrawn) The method of claim 23, one of the health parameters including current.

28.   (Withdrawn) The method of claim 23, one of the health parameters including voltage.

29.   (Withdrawn) The method of claim 23, further comprising producing diagnostic data relating to the cause of a failed electrical device.

30.   (Withdrawn) The method of claim 23, further comprising producing prognostic data to estimate the remaining operating lifetime of a device.

31.   (Withdrawn) An article of manufacturing comprising a computer usable medium having computer readable instructions stored thereon to perform the method of claim 23.

32.   (Canceled)

33.   (Canceled)

34.   (Canceled)

35.   (Canceled)

36.   (Currently Amended) The system of claim [[32]] 1, the interface is a separate unit.

37.   (Previously Presented) The system of claim 36, the power line is connected to the interface and a data communications connection can be made from the interface to particular devices.

38.   (Previously Presented) A system for controller configuration and programming, comprising:

  a controller connected to a power line; and

  a configuration device that can be connected to a wide area network (WAN), wherein the configuration device and the controller utilize at least an interface to communicate over the power line and the network to enable remote controller configuration and programming.

39.   (Previously Presented) The system of claim 38, the interface is a separate unit.

40.   (Previously Presented) The system of claim 38, the power line is connected to the interface and a data communications connection can be made from the interface to particular devices.

41.   (Previously Presented) The system of claim 38, the WAN is the Internet.

42.   (Previously Presented) The system of claim 38, the interface is configured using hardware, software, or a combination thereof to create a plurality of virtual networks.